

case capability.

Color appears to be the rising attraction as a user-oriented feature. And Astrovision with the Astroarcade is prepared to cash in on the capability it offers.

The Astroarcade is a Z80 based add-on system starting at \$299 for the basic game unit with a \$599 keyboard unit that houses a disk controller. It also has serial ports, cassette tape controller and voice synthesizer, and is totally oriented toward color.

The system, designed by Jeff Frederiksen, developer of the coin-operated circuitry used in Bally arcade games, says it's the only personal computer that approaches the realism and animation capability found on coin-operated arcade machines. This wizardry is achieved by employing three microprocessors, 4K of RAM, 8K of ROM (expandable to 32K), and an optional Astro BASIC in ROM cartridge.

The custom-designed video processor chip, operating at 7 MHz, handles all color manipulation and NTSC broadcast quality video. The result is a color display that rivals even expensive commercial graphics processors.

In operation, you can select from a pallette of 256 colors (four at a time in video games or two at a time with Astro BASIC). The screen is continually mapped in 4K RAM allowing for com-

MAY 1982

plex imagery that approaches that found on expensive CAD graphics systems.

The second processor, also a custom I/O chip, handles the interfacing to hand-held controls, and is responsible for producing music equal to that available on expensive music synthesizers.

Attaching the Arcade to the ZGrass-32 (keyboard element) computer gives you Z80 power and the use of other peripherals including disks, printers, and modems. (See the color photo in "The Electronic World," made by Real Time Design, Inc., with this system.)

↳ DeFanti

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